Honeywell

Metrologic®

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IS4920

Miniature Decoded Area-Imaging Engine

Honeywell's IS4920 miniature decoded area-imaging engine easily integrates with a wide range of OEM devices whose applications demand a robust omnidirectional scanning performance.

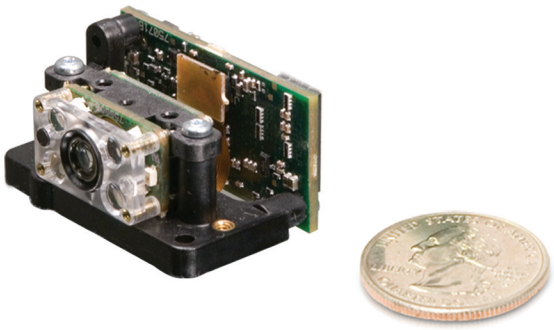
Built with Honeywell's advanced area imager and industrial standard form factor, the IS4920 provides an effective solution for capturing high-quality images and decoding bar codes in existing and new applications associated with mobile computers, hand-held scanners, self-service and payment kiosks, identity verification, medical/diagnostic instruments and lottery terminals.

The imager features a mega-pixel CMOS sensor and a wide-angle lens that scans twice the area of competing models. An integrated aiming LED helps users guide targets into scan zone. The decode board is loaded with Swift*Decoder*™ software which delivers unrivaled decoding capability, speed and aggressiveness, especially when scanning damaged, poorly-printed or wrinkled codes. IS4920 decodes the widest set of symbologies and reads OCR fonts (A, B and MICR). IS4920 consumes about half of the power of a typical competing model.

The imager and decode board can be ordered as an assembled module or separate components. The decode board supports 3 – 5.5 volt power inputs and TTL-level RS232 or USB communication.

Since its open-system architecture allows third-party and custom plug-ins, the IS4920 has virtually unlimited application flexibility. The IS4920 is also compatible with MetroSet®2 PC-based software for easy configuration and flash upgrades.

For more information on the IS4920 miniature decoded area-imaging engine, please visit www.honeywell.com/aidc



Features

- **Mega Pixel Imaging Sensor:** Captures high resolution images for decoding bar codes or upload
- **Wide Angle Lens Design:** Covers a large scanning area for easy scanning experience
- **Total*Freedom*™:** Expands scanner functionality by allowing formatting, parsing and decoding plug-ins to be loaded directly to the IS4920 instead of the host system
- **Code*Select*™:** Scans up to 7 bar codes in a single flash and outputs in any predetermined order
- **Swift*Decoder* Software:** Decodes all standard 1D and 2D codes—even wrinkled, damaged or poorly printed—quickly and accurately

IS4920 Technical Specifications

Operational			
Light Source	Illumination: 650 nm; Aiming 615 nm		
Host System Interfaces	USB, TTL-level RS232		
Mechanical			
	Imager (no mounting tab):	**Decode Board:**	**Bracketed Module:**
Dimensions (LxWxH)	14.5 mm x 20.6 mm x 11.9 mm (0.57˝ x 0.81˝ x 0.47˝)	6.7 mm x 38.4 mm x 19.4 mm (0.26˝ x 1.51˝ x 0.76˝)	27.83 mm x 38.4 mm x 19.4 mm (1.10˝ x 1.51˝ x 0.76˝)
Weight	5 g (0.17 oz)	4 g (0.14 oz)	14 g (0.49 oz)
Termination	12-POS connector (Molex 52559-1252)		
Electrical			
Input Voltage	3.0 - 5.5 VDC		
Operating Current	235 mA @ 3.3 VDC - typical; 400 mA @ 3.3 VDC & 25°C - max		
Idle Current	USB: 160 mA @3.3 VDC - typical; TTL: 125 mA @ 3.3 VDC - typical		
Sleep Current	USB: 600 µA @3.3 VDC - typical; TTL: 500 µA @3.3 VDC - typical		
LED Class	Class 1: IEC60825-1, EN60825-1		
EMC	FCC Part 15, ICES-003, EN55022 Class B with a shielded flex cable		
Environmental			
Operating Temperature	0°C to 40°C (32°F to 104°F)		
Storage Temperature	-20°C to 70°C (-4°F to 158°F)		
Humidity	0% - 95% relative humidity, non-condensing		
Drop	Designed to withstand 1.5 m (5´) drops to concrete floors when mounted inside a scanner case		
Vibration	7 G over 10 - 500 Hz		
Light Levels	0 - 100,000 lux (9,290 foot-candles) (total darkness - direct sunlight)		
Scan Performance			
Scan Pattern	Area		
Sensor Resolution	1.3 megapixel		
Field of View	Horizontal: 50°; Vertical: 37.5°		
Focal Point	10 cm (4.0˝)		
Print Contrast	20% minimum reflectance difference		
Decode Capability	**1D**: Code 39, Code 93, Code 128, UPC/EAN/JAN, Code 2 of 5, Code 11, Codabar, MSI Plessey, GS1 DataBar, Telepen, Trioptic **PDF**: PDF417, MicroPDF417 **2D**: QR Code, Micro QR Code, Data Matrix, Aztec Code, Maxicode, Codablock, Composite Code, POSTNET, PLANET, UPU, Intelligent Mail, Canada Post, Australia Post, Japanese Post, Royal Mail RM4SCC, KIX Code *__OCR:__ OCR-A, OCR-B, E-13B MICR ***Note**: *Enable by purchasing decoding license*		

Typical Performance*	
Narrow Width	Depth of Field
5 mil (1D)	50 mm - 145 mm (2.0˝ - 5.7˝)
10 mil (1D)	30 mm - 210 mm (1.2˝ - 8.3˝)
13 mil (1D)	25 mm - 310 mm (1.0˝ - 12.2˝)
5 mil (PDF)	45 mm -160 mm (1.8˝ - 6.3˝)
10 mil (PDF)	25 mm - 270 mm (1.0˝ - 10.6˝)
*Resolution: 1D: 4 mil (0.102 mm) *Performance may be impacted by bar code quality and environmental conditions	

Typical Performance*	
Narrow Width	Depth of Field
10 mil (Data Matrix)	50 mm - 95 mm (2.0˝ - 3.7˝)
15 mil (Data Matrix)	35 mm - 160 mm (1.4˝ - 6.3˝)
20 mil (Data Matrix)	40 mm - 260 mm (1.6˝ - 10.2˝)
*Resolution: Matrix Code: 7.5 mil (0.191 mm) *Performance may be impacted by bar code quality and environmental conditions	

For more information:

www.honeywell.com/aidc

Security & Data Collection

Honeywell Scanning & Mobility

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